

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

--1. (withdrawn) A method for screening substances capable of having therapeutic action in the treatment of transmissible subacute spongiform encephalopathies (TSSEs), characterized in that it comprises the following steps:

- a) inoculation at time  $t_A$ , into at least one laboratory animal selected from the group consisting of rodents, by any appropriate route, of a nonconventional transmissible agent (NCTA);
- b) administration to the said laboratory animal, by any appropriate route, of either a substance to be screened (test animal), or of a placebo (negative control animal), within a period between  $t_A - 15$  days and  $t_C$ , corresponding to the time when the PrPres level in the spleen of the said laboratory animal is at maximum or within a period between  $t_B$ , corresponding to the time of the first detection of PrPres in the spleen of the said laboratory animal and  $t_C$ ;  $t_B$  being between  $t_A$  and  $t_A + 15$  and  $t_C$  being between  $t_A + 25$  and  $t_A + 30$ ;
- c) sacrificing of the animals within a time interval between  $t_B$  and  $t_C$ , preferably at  $t_C$ , and collecting of the spleen,  $t_A$ ,  $t_B$  and  $t_C$  being expressed in days;
- d) isolation of the PrPres from each spleen collected, according to a suitable method of isolation comprising the homogenization of the spleen, followed by a specific extraction of the PrPres comprising a single separation step, from the homogenate obtained, and optionally the purification of the PrPres;
- e) semiquantification of the PrPres obtained in step (d) by detection of the said PrPres by any appropriate method, producing a specific signal, followed by a comparison of the signal obtained with a calibration series of dilutions of a positive control consisting of a brain homogenate from an animal at the terminal stage of the disease; and
- f) selection of the screened substances as a candidate for the treatment of transmissible subacute spongiform encephalopathies, if the PrPres level obtained in the spleen of the test animal, in step e), is reduced by at least a factor of 2 compared with the level obtained under the same conditions with the negative control animal.

2. (withdrawn) A method of screening according to Claim 1, characterized in that in step

a) the said NCTA is preferably administered in a buffer suited to the route of administration selected in the form either of a crude tissue, preferably brain, homogenate, or of a PrPres pellet, obtained by appropriate centrifugation, from a crude tissue, preferably brain, homogenate.

3. (withdrawn) A method of screening according to Claim 1, characterized in that in step a) the said NCTA is administered by the intraperitoneal route, at a dose corresponding to an inoculum of NCTA, between 0.001% and 10% (weight/volume) ( $LD_{50}$  between  $10^3$  and  $10^7$ ).

4. (withdrawn) A method of screening according to Claim 1, characterized in that in step d) the said method of isolation is selected such that the ratio: maximum level detectable in the spleen/cut off is greater than 2 or such that a  $\frac{1}{2}$  dilution of the final sample obtained still provides a detection signal.

5. (withdrawn) A method of screening according to Claim 1, characterized in that in step d) the said method of isolation of PrPres comprises a separation in a single step.

6. (withdrawn) A method of screening according to Claim 1, characterized in that in step e) the PrPres is detected by immunoassay.

7. (canceled)

8. (currently amended) A method of isolating PrPres, from an organ or a tissue, in particular the spleen or the brain, consisting essentially of:

(i) homogenization of organ or tissue, collected after sacrificing the animal, by mechanical grinding in a homogenization buffer, followed by the addition, to the homogenate obtained, of a salt having a high ionic strength and capable of promoting the aggregation of the PrPres in a 1:1 (v/v) ratio, followed by calibration of the homogenate, for the production of a homogenate comprising, in weight/volume, from 5 to 50% of the said organ or tissue; and

(ii) specific extraction of PrPres by treating the homogenate obtained in step (i) by incubating the suspension obtained with a solution comprising a protease and an anionic detergent capable of promoting the aggregation of the PrPres, and a single separation of the

PrPres, by centrifugation at 25,000-60,000 g.h, ~~for example at 25,000-30,000 g for 1 to 2 h,~~  
~~preferably at 16-22°C,~~ of the suspension obtained, deposited on a buffer cushion having a  
density of between 1.02 and 1.08, at 20°C and recovering the centrifugation pellet comprising  
the said PrPres ; and, if necessary,

~~—— (iii) purification of the PrPres by suspending the centrifugation pellet obtained in (ii) in a  
Laemmli buffer comprising 1-5% SDS, incubating in this buffer at 100°C for 2-10 minutes and  
centrifuging at 12,000-15,000 g for 10-15 minutes at 16-22°C.~~

9.-11. (canceled)

12. (currently amended) The method according to Claim 8, wherein during the extraction  
step (ii) the solution used for the extraction comprises an anionic detergent capable of promoting  
the aggregation of the PrPres and a zwitterionic detergent, ~~such as a sulphobetaine, preferably the  
sulphobetaine SB3-14 at 1-2%, in a 1:1 (v/v) ratio.~~

13. (previously presented) The method according to Claim 8, wherein in the extraction step  
(ii) the centrifugation is carried out after depositing the suspension containing the PrPres on a  
cushion comprising, in a mixture, 6-20% sucrose and a sulphobetaine.--

14. (canceled)

15. (withdrawn) A method of detecting the presence of PrPres in an organ or a tissue,  
comprising isolating PrPres from the organ or tissue in accordance with the method of claim 7,  
and contacting the isolated PrPres with an antibody capable of specific binding to the PrPres.

16. (previously presented) The method according to claim 8, wherein the homogenization  
buffer in step (i) is a neutral buffer selected from the group consisting of water and isotonic  
buffers.

17. (previously presented) The method of claim 16, wherein the isotonic buffer is 5% glucose.

18. (previously presented) The method of claim 8, wherein in step (i), the salt having a high ionic strength is 10-30% NaCl.

19. (previously presented) The method of claim 8, wherein in step (ii), prior to centrifugation, at least one protease inhibitor is added.

20. (previously presented) The method of claim 8, wherein the anionic detergent is 10-30% sarkosyl.

21. (previously presented) The method of claim 8, wherein in step (ii), the centrifugation is carried out after depositing the suspension containing the PrPres on a 6-20% sucrose cushion.

22. (currently added) The method of claim 8, wherein in step (ii) the centrifugation is carried out at 25,000 – 30,000 g for 1 to 2 hours.

23. (currently added) The method of claim 8, wherein in step (ii) the centrifugation is carried out at 16 – 22°C.

24. (currently added) The method of claim 8, further comprising the step consisting essentially of:

purification of the PrPres by suspending the centrifugation pellet obtained in (ii) in a Laemmli buffer comprising 1-5% SDS, incubating in this buffer at 100°C for 2-10 minutes and centrifuging at 12,000-15,000 g for 10-15 minutes at 16-22°C.

25. (currently added) The method of claim 12, wherein the zwitterionic detergent is a sulphobetaine.

26. (currently added) The method of claim 25, wherein the sulphobetaine is the sulphobetaine SB3-14 at 1-2%.